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<u>ABSTRACT</u>

Systems, methods and mediums are provided for automating experiments within an automated environment without the need to disassociate the test subject (e.g., the semiconductor chip or chips) from that environment. An "experiment" may be a pre-planned deviation of an established (e.g., pre-defined) process utilizing the automated environment.

A computer-implemented method, system and computer-readable medium for managing experiments, such as those relating to semiconductor technology. An experiment order includes some deviation from a base process capable of operating in an automated environment. An approval of the experiment order is obtained from a distribution list of users, while permitting the users to attach documents to the experiment order or perhaps modify the experiment. The experiment order is translated into processing data suitable for implementation by said automated environment, and stored. The experiment is caused to be executed in conjunction with at least some portion of said base process via the automated environment according to the processing data.